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ABSTRACT

Networking, i.e., two or more libraries and/or organizations engaged in common problems of information exchange for functional purposes, is viewed in terms of the human aspects, the impact of technology, and the forced alliance with other fields. Projects in Tasmania relating to networking of administrative services for the public education system and the public library are referred to, followed by a general discussion of how technology, which has facilitated more widespread communication, has inevitably led to networking. Cohabitation is appropriately discussed in relation to networking and is defined as developing initially as an awareness phase, where mutual needs become apparent and lead to reciprocity. The future trends of networking include an increase in volume; more reciprocal agreements between public schools and libraries; the realization that cost effectiveness of computer and data base use will only occur through cooperative networking arrangements; the shift from limited service to full service networks; and from service to an elite group to service for all. (Author/MBR)

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THE FUTURE: COHABITATION AND NETWORKING

by

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THE FUTURE: COHABITATION AND NETWORKING

Hello Friends. And there are many of you all about me, for our mutual professional and associational and personal interests have drawn us together in many ways over the years.

I have been asked to speak about Cohabitation and Networking today. The first is an interesting term, subject to several interpretations. I believe I'll reserve comment on cohabitation for a little later in my talk.

I'll begin with some thoughts on Networking.

According to the National Commission on Libraries and Information Science, networking is:

> Two or more libraries and/or other organizations engaged in a common problem of information exchange, through communications, for some functional purpose. A network usually consists of a formal arrangement whereby materials, information, and services provided by a variety of types of libraries and/or other organizations are made available to all potential users. Libraries may be in different jurisdictions but agree to serve one another on the same basis as each serves its own constitutents. Computer and telecommunications may be among the tools used for facilitating communications among them. (NCLIS, 1975, p. 82)

A couple of months ago I had a visitor from a faraway place--Tasmania, an island off the coast of Australia. Mr. Glenn Pullen is the Assistant State Librarian, and, parenthetically also in Education Services. He told me about

the recent merger in administration in Tasmania which has brought together administrative services for the public education system, K through 12 plus adult and continuing education services, and the public library system. One of the new procedures was the establishment of a joint processing center for school and public libraries.

Another was the review of sharing facilities between school libraries and public libraries...there are about 200 sub units in the system, and after careful analysis, 12 were deemed to have enough commonalities to become a shared facility. Three have gone into operation, successfully it seems.

Mr. Pullen, as assistant State Librarian, is actually in the State Department of Education in Tasmania, because this position gives him more authority with the school principals, but he has line responsibilities with the State Library.

He shared with me the fact that the greatest tensions stem from apprehension of who's in charge--and that every effort has been made to form written agreements with provisions clearly stipulated concerning salaries and responsibilities.

Tasmania, by virtue of its size and its geographical entity as an island, can enter into such a daring arrangement. There is a clearly demonstrated need--no one community could afford to supply all its needs, and the source of supply is thousands of miles away. Nonetheless, even with all these self-contained and obvious advantages, Mr. Pullen told me that there had been years of intensive preparation to produce the merger, invested with heavy support from the political structure. Montana's relative isolation was one of the factors

working to Mabel Brewer's advantage in Flathead County.

Networking is not a new model. It is a tradition in our profession, a tradition which only recently has been given a contemporary label. For example, an informal network of relationships has been built for us and by us through our many library associations. We form such organizations readily; a recent issue of the Encyclopaedia of Associations showed 75 associations of Libraries and Librarians! We meet, discuss, serve together on committees, correspond, and exchange information and experiences. We begin to know something about each other as persons, as well as professionals. We mourn together when one of us has a sorrow, or when someone who has been an integral part of our experience leaves us forever. Our mutual interests draw us together; our professional orientation is towards supportive activities.

Supportive activities have a long history with us. Consider the librarians who contributed to William F. Poole's Index to Subjects Treated in the Reviews and Other Periodicals. Those men and women of the nineteenth century showed both initiative and willingness to provide wider service through cooperative work when capital was lacking. That should lend substance to Dean Holley's statement that "social institutions cooperate when poor--or if it is to their self-interest." The definitions and manipulation of self-interest is significant to successful cooperation.

We live today in a collective culture of cooperative projects, collaboration, and acronym proliferation. Corporate entry is increasing, both in library-related publications and in general. I had sensed this increase from casual observation, and decided to consult Don Hayes, our college-pundit-on-cataloging. Don,

besides being our Head Cataloguer, is a classical scholar, an equestrian, and an extremely literate progressive. He supported my observation, and we discussed together some of the implications of the growing interdependence in our society, caused and nourished by technological advances.

Technology compounds structure, forcing us into interdependence of an unprecedented nature. Today an individual may compose a piano sonata, and another individual may perform it, but producing the performance for television broadcast requires a squadron of trained professionals and technicians. Committee structure permeates our culture--from the campus to Capitol Hill. Management is pluralistic; the emphasis is on participatory teamwork. Research is synthesis; Nobel prizes are given in multiples.

Technology has also compressed the time element in the rate of change in our society, with the complication of instant global communication--and little time to assimilate that change.

Consider the definition of "generation", which in humans is roughly thirty years, the average period between birth of parents and birth of offspring.

Computer history is also written in "generations"--of a different magnitude. Recall if you will, IBM's MARK I, which was birthed in 1944, followed a year later by ENIAC, the first all electronic computer. The technology which spawned these engines developed the first generation of computers, characterized by the vacuum tube, a generation which lasted thirteen years, from 1946-1959. Second generation computers, the transistor generation, compressed the time period to a short seven years, from 1959 to 1965. Integrated circuits produced the third generation, which lasted only 5 years, from

1965 to 1970. And now we are in a fourth generation, which is constantly mutating in a less dramatic fashion, primarily in the form of greater miniaturization. Visible limitations to the mutations are primarily in the form of utility--the pocket calculator has been reduced to a minimum, its limitation governed by the size of our fingertips!

At the outset of these four computer generations, which correspond to about one generation in terms of human beings, the emphasis was on the "Machine," the Hardware. The language was highly technical, the focus on equipment. As the hardware technology developed and stabilized, the emphasis began to shift toward sharing programs to be used on the machines. A new and confusing term, "Library Programs," meaning general utility programs for computers, crept into our vocabulary. They were adopting our terminology; we were adapting (and perplexed we were, because those Library Programs weren't in our Library, and most of us didn't know how to use them). Many of us learned to revere the programmer, who seemed at times to be reshaping our reality.

The impact of these rapidly successive generations has taxed us all in our ability to comprehend and adapt. Decision-making in terms of what and how has become a monstrous responsibility, because the cost of a bad decision is enormous.

Technology has moved libraries into a new posture of accountability. Our systems, once invested with a personal mystique we considered unique to our profession, have become exposed--a direct result of the technological interface with the computer center. Data is analyzed; comparisons are inevitable. When information is shared, errors are exposed. We have gone public. We are into regional, national and international networks of a formidable nature--with MARC,

UNIMARC, FRENCH MARK, and the GERMAN MARC, (which is also doing nicely in the international exchange).

Our one human generation of cohabitation with four generations of computers has increased the collectivity of our culture. It has seen the emergence of title and corporate entry over the hallowed main entry principle--for with the potential of access from any point in a data base, we have achieved a new flexibility. Individual options are becoming available. There is now an experiential data base in addition to a merely quantitative data base. Out of the mass of the accumulation of information and experience is emerging the capability of humanization and flexibility within computer technology.

We have also achieved a new visibility, as we enter into alliance with other professionals, both outside our field in data base management, and within our field, as we expand our networking capabilities.

Networking makes us more vulnerable to criticism because of that greater visibility. And our future clearly seems to be dependent on ever greater systems of networks and consortia.

We are fortunate that our direction for this future is based on an extensive history of cooperation. Our profession, by its nature, is committed to the creation of links and bridges. We are an interdisciplinary science. Few of us are encyclopaedists, but we know how to utilize our encyclopaedias. The curriculum--always an awesome word when used abstractly to refer to the ordering of human knowledge--the Curriculum is becoming increasingly fragmented in an era of super-specialization. Our systems--classification, bibliographic, retrieval--provide some methodology for focusing through the kaleidoscopic view of knowledge, and creating order from those fragments.

That ordering of knowledge is a natural for cooperation.

Our partnerships, our cooperative endeavours serve multiple needs. Such efforts as Interlibrary Loan, cooperative and centralized cataloguing, and compilations of bibliographies and union lists are common. Centralized storage centers; specialization in collecting, such as the Farmington Plan; cooperative photographic projects, such as the Library of Congress newspaper microfilm project, require new levels of planning and responsibility.

As the potential value of increased participation continues to grow, new forms of networks are being attempted. Not all members need, or contribute the same resources to identical degrees--just as in personal relationships. A network is based on people and their interactions. Ernie Tompkins' ILC-Library cooperation is a specific example of identifying compatible components within two organizations and providing mutual needs and supports. They fill one another's needs from an oversupply instead of stockpiling--they find complementary fulfillment. A network is a humanistic organism. As Don Pelkey stressed in his talk, the personal interrelationships are most important--are basic to success.

Who should be in a network? One basic assumption is that networking recapitulates similarities. There are many likenesses among all education/library/information service units. Any library should be more like any other library than it is like a bank, a restaurant, or a church--even though these examples are also service-oriented. Cooperative efforts are emerging wherever there are enough similarities to warrant cohabitation.

And now I'll speak for a moment to that word. I was startled when Dan Vann gave me the title during a coast-to-coast phone call. The term jarred me for a while until I had a few moments of enforced meditation, in my eye doctor's waiting room, while my pupils were being dilated. The waiting period, as my vision blurred, forced my thoughts inward, and was a productive one, because the meaning of cohabitation as applied to networks became clear. Coordinate projects might be considered in the same light as cohabitation between two persons. First there is an awareness phase, as similarities become apparent, and reciprocal needs are revealed. The two drift together for mutual support, sharing common interests, and eventually remain in a bonding relationship as long as it is mutually beneficial. A coordinate project between institutions or agencies need not be like a traditional marriage, with its impressive ceremony--furthermore, the project need not be viewed like a marriage, which if it does not live up to expectations, ends with a bitter divorce. Normally, in human cohabitation, the partnership develops with a modest amount of public display, and dissolves without the rancor and anguish of a typical divorce. (Lindenfeld's relationship with Shelby State and Memphis is a tricky partnership--more like a triangle.)

Therefore, cohabitation as applied to networks and cooperative activities is an appropriate term. The agencies or institutions involved agree to "live together", as it were, in a liaison based upon mutual needs and upon a common solution--but the relationship is not of the "till death do us part" calibre. The ending of a cooperative activity should be a mature and a serious act, arrived

at because to continue to cohabit would no longer be mutually beneficial. There should be no stigma attached to the conclusion of a cooperative project. It may have fulfilled its goal and thereby become obsolete. Or perhaps it simply couldn't work, in spite of carefully projected preparation. Just as any liaison between people, a cooperative activity is dependent for its continuation upon rewards and successful accomplishments. As in a liaison between people, the question of identity arises. Who's stronger? In a good relationship, each capitalizes on the other's strengths. Furthermore, a good relationship is nutured by two important qualities which Mary Jo Lynch referenced for us earlier today: Imagination and good will.

A network only works if it can satisfy the needs of those who are affected. There is an innate human resistance to change, and a strong fear of the unknown.

I've rambled over a number of general ideas about networking. I've talked about human aspects, the impact of technology, the forced alliances with other fields. In preparing for this talk today, I used an informal information network, calling on the expertise of friends--some on my staff, some in our system, and others who were within reach. One of those friends is my husband, a distinguished librarian. Dale, who is currently preparing a paper for publication dealing with the ERIC system, shared with me some important articles in the School Media Quarterly, a source I would have overlooked without a serious search of the literature.

Patricia Pond and James Liesener, writing in the Fall 1977 issue of School Media Quarterly have produced an enlightening article called Networks, Data Bases and Media Programs. The article discusses implications of data

bases and networks, suggests basic information necessary to make sound program decisions, and gives highlights of information on existing data bases and networks. The authors reference the Washington Library Network, a major effort in interlibrary cooperation. I recommend further reading about that program in the State of Washington; it is a progressive and effective network.

Pond and Liesener have noted and identified some major trends in the relatively brief period of the development of networks. I quote:

> ...several trends are noteworthy of consideration. These trends are from single-type library networks to multitype library and other institution networks: from "limited service" networks, that is, those concentrating on one function, most typically bibliographic services, to "full-service" networks, consisting of interlibrary services, reference and referral services, computer services, and telecommunication services; and from initial concern with service to elites, such as academic and scientific users, to access for all.

From these trends, it is possible to make some inferences for the future. Not perhaps the magic moment future of the year 2,000 of which Alice Ihrig spoke--but a look into our immediate tomorrow.

Networks have proved to be valuable; they will continue to proliferate. In computer use, as the cost of computer hardware continues to drop at an astonishing rate, the significant cost of developing software and data bases assumes greater importance. Only a widespread sharing of programs and data bases can accomplish any dramatic improvement in costs--and for that reason we have associations such as EDUCOM, a consortium of university computer users. Greater banding together and sharing is inevitable.

The character and scope of participants in networking will increase. More public school systems will enter into reciprocal arrangements with libraries, both public and community college. Participation will vary with location, resources, and need; but it will occur.

And finally, we stand in the midst of dramatic change. Networks are challenging and changing the status quo--in the form of services, work procedures, and approaches to the management of people and of library operations. Since networking is a reciprocal arrangement, with services offered to others in return for services rendered, it is essential to make sincere commitments to visibility and access. And we must temper our commitment with a generous dose of Alice Ihrig's dictum: BE JOYOUS!

Changes are affecting the libraries and other agencies who are participants--but nonparticipants too will be affected. The change is extensive and pervasive, analagous to the ripples which spread when a pebble is tossed into a pond. Those ripples are spreading and encompassing new agencies and institutions. The ripples are the wave of the future.